

### fact sheet

# Fluorescent Lamp Management for Businesses & Institutions

Using fluorescent lamps makes business and environmental sense because they consume one quarter as much electricity as incandescent lighting. At the same time, spent and broken fluorescent lamps need to be handled very carefully because the phosphor powder inside them contains mercury. Standard linear fluorescents, lamps with green end caps or green marking, compact fluorescents, germicidal lamps, and high intensity discharge (HID) and high-pressure sodium lamps used in outdoor lighting all contain mercury.

When broken, burned in waste-to-energy plants or buried in landfills, fluorescent lamps release mercury. Since not even the best pollution control devices can completely prevent mercury from entering the environment, the Massachusetts Department of Environmental Protection (MassDEP) recommends recycling all fluorescent lamps. Fluorescents that do not have green end caps or green marking must be recycled as universal waste or managed as hazardous waste. It is against the law to throw them in the trash.

#### Why is mercury a problem?

Mercury is toxic to the human nervous system, kidneys, liver and immune system. When inhaled or ingested, it can cause a range of physical symptoms. Mercury that is released to the environment "bioaccumulates" in fish – that is, it builds up in their tissue over time – making them less healthful or even dangerous to eat. The Massachusetts Department of Public Health (DPH) has advised pregnant women, nursing mothers, women of child bearing age and children under 12 to avoid eating freshwater fish from lakes, rivers and streams that are not replenished by government stocking programs. DPH has also recommended that all Massachusetts residents avoid certain fish from those bodies of water where sampling has revealed a significant mercury problem.

What are the risks of mercury exposure from handling lamps? Only broken lamps pose a hazard. When they are handled properly to minimize breakage, there is little chance of mercury exposure. In fact, an active lamp recycling program can reduce the likelihood of an accidental mercury release by stressing the importance of handling lamps carefully.

## Are there specific rules for handling spent and broken lamps? MassDEP regulates the accumulation, storage, transportation and disposal of hazardous wastes, including fluorescent lamps, under the *Massachusetts Hazardo*

hazardous wastes, including fluorescent lamps, under the *Massachusetts Hazardous Waste Management Act* and the federal *Resource Conservation and Recovery Act (RCRA)*.

Fluorescent lamps may be recycled under the streamlined provisions of the *Universal Waste Rule* (found at 310 CMR 30.1000), which MassDEP adopted to encourage the recycling of consumer products with specific toxic or hazardous constituents. If you choose to recycle fluorescent lamps, you must:

- Store unbroken lamps in a box or fiber drum to prevent breakage, and keep that container in a secure, protected area.
- Label the container *Universal Waste Spent Fluorescent Lamps* and mark it with the date on which you first began storing the lamps.
- Have these lamps collected by or deliver them to an authorized lamp recycler, hazardous waste transporter or another universal waste handler within one year of the date marked on the container.

#### What do I do if a lamp breaks?

If it happens indoors, close off the room to other parts of the building, open a window and leave the area for at least 15 minutes to allow the mercury vapor to dissipate. When you return, scoop up the glass and powder debris with a stiff paper and place the material in a sealed container labeled *Broken Fluorescent Lamps*. Never use a vacuum cleaner, which will only disperse the mercury over a wider area, then itself need to be handled as a hazardous waste. All mercury-contaminated debris, including cleanup materials, must be disposed as hazardous waste.

#### How can I dispose of spent or broken fluorescent lamps?

A number of companies recycle fluorescent lighting fixtures, several of which are listed below. MassDEP cannot guarantee that recyclers listed here – particularly those located outside of Massachusetts – are in full compliance with hazardous waste regulations.

#### Fluorescent Lamp Recycling Facilities

Advanced Environmental Recycling Corp. 2591 Mitchell Avenue Allentown, PA 18103 (800) 554-2372

Onyx Environmental Services 218 Canton Street Stoughton, MA 02072 (781) 341-6080

Bethlehem Apparatus 890 Front Street Hellertown, PA 10855 (610) 838-7034

Full Circle Inc. 509 Manida Street Bronx, NY 10474 (800) 775-1516 American Lamp Recycling 22 Stage Door Road Fishkill, NY 12524 (800) 315-6262

Northeast Lamp Recycling 250 Main Street East Windsor, CT 06088 (860) 292-1992

Mercury Waste Solutions 26 Railroad Avenue Albany, NY 12154 (518) 489-6347

Eastern Environmental, Inc. 47 Purdy Avenue Port Chester, NY 10573 (800) 808-7227

\Massachusetts Department of Environmental Protection One Winter Street Boston, MA 02108-4746

> Commonwealth of Massachusetts

Executive Office of Environmental Affairs

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This information is available in alternate format by calling our ADA Coordinator at (617) 574-6872.



#### **Sources of Information and Assistance**

- General Information about Mercury: MassDEP Mercury Hotline toll-free at (866) 9-MERCURY or (866) 963-7287
- Health Effects of Mercury: DPH at (617) 624-5757
- Universal/Hazardous Waste Regulation: MassDEP Business Compliance Assistance Line at (617) 292-5898
- On-Site Pollution Prevention Assistance: Office of Technical Assistance for Toxics Use Reduction (OTA) at (617) 626-1060
- Association of Lighting and Mercury Recyclers http://almr.org